IMPLEMENTATION SCHEDULE

The Implementation Schedule that follows describes recovery task priorities, task numbers, task descriptions, duration of tasks, potential or participating responsible parties, total cost estimate and estimates for the next 5 years, if available, and comments. These tasks, when accomplished, will lead to recovery of bull trout in the Middle Columbia Recovery Unit. Costs estimates are not provided for tasks which are normal agency responsibility under existing authorities.

Parties with authority, responsibility, or expressed interest to implement a specific recovery task are identified in the Implementation Schedule. Listing a responsible party does not imply that prior approval has been given, nor require that party to participate or expend any funds. However, willing participants may be able to increase their funding opportunities by demonstrating that their budget submission or funding request is for a recovery task identified in an approved recovery plan, and is therefore, part of a coordinated effort to recover bull trout. In addition, section 7(a)(1) of the Endangered Species Act directs all Federal agencies to use their authorities to further the purposes of the Endangered Species Act by implementing programs for the conservation of threatened or endangered species.

The following are definitions to column headings in the Implementation Schedule:

<u>Priority Number</u>: All priority 1 tasks are listed first, followed by priority 2 and priority 3 tasks.

Priority 1: All actions that must be taken to prevent extinction or to prevent the species from declining irreversibly in the foreseeable future.

Priority 2: All actions that must be taken to prevent a significant decline in species population, habitat quality, or some other significant negative effect short of extinction.

Priority 3: All other actions necessary to provide for full recovery (or reclassification) of the species.

<u>Task Number and Task Description</u>: Recovery tasks are numbered as in the recovery outline. Refer to the action narrative for task descriptions.

<u>Task Duration</u>: Expected number of years to complete the corresponding task. Study designs can incorporate more than one task, which when combined, may reduce the time needed for task completion.

<u>Responsible or Participating Party</u>: The following organizations are those with responsibility or capability to fund, authorize or carry out the corresponding recovery task.

A **bold typeface** indicates the agency or agencies that have the lead role for task implementation and coordination, though not necessarily sole responsibility. Identified parties include:

BC Benton County

BPA Bonneville Power Administration
BRD USGS Biological Resources Division

CD Conservation districts (CD)

EPA Environmental Protection Agency

ID Irrigation districts
KC Kittitas County

NMFS National Marine Fisheries Service

NRCS Natural Resources Conservation Service
TCWRA Tri-County Water Resource Agency

USBR U.S. Bureau of Reclamation

USFS U.S. Forest Service

USFWS U.S. Fish and Wildlife Service

WDFW Washington Department of Fish and Wildlife WDNR Washington Department of Natural Resources

WDOE Washington Department of Ecology

YC Yakima County YN Yakama Nation

<u>Cost Estimates</u>: Cost estimates are rough approximations and provided only for general guidance. Total costs are estimated for the duration of the task, are itemized annually for the next 5 years, and include estimates of expenditures by local, Tribal, State, and Federal governments and by private business and individuals.

An asterisk (*) in the total cost column indicates ongoing tasks that are currently being implemented as part of normal agency responsibilities under existing authorities. Because these tasks are not being done specifically or solely for bull trout conservation, they are not included in the cost estimates. Some of these efforts may be occurring at reduced funding levels and/or in only a small portion of the watershed.

Double asterisk (**) in the total cost column indicates that estimated costs for these tasks are not determinable at this time. Input is requested to help develop reasonable cost estimates for these tasks.

Triple asterisk (***) indicates costs are combined with or embedded within other related tasks.

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	Middle Columbia Recovery Unit - Implementation Schedule										
	Task	Task description	Task	Responsible parties		(Cost estima		Comments		
Priority number	number		duration (years)		Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
1	1.1.3	Assess development.	25	YC, KC, BC WDNR, WDFW	***						Ongoing ¹ . Coordinate with 6.1.1
1	1.2.1	Screen diversions.	5	WDFW, BOR, USFWS, NMFS	5000	1000	1000	1000	1000	1000	
1	1.2.2	Diversion operations.	5	WDFW, USBR, WDNR, USFWS, ID	500	100	100	100	100	100	
1	1.2.3	Irrigation withdrawal.	3	WDNR, YN, YC, KC, USBR, BC NRCS, WDFW	150	50	50	50			

¹Ongoing tasks are currently being implemented as part of normal agency responsibilities that may benefit bull trout. Because these actions are not specifically being done to address bull trout conservation, they are not included in the cost estimates. Some of these efforts may be occurring at reduced funding levels and/or in only a small portion of the watershed.

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	Middle Columbia Recovery Unit - Implementation Schedule													
	Task Task description number	Task description	Task	Responsible		(Cost estima	tes (\$1,000))		Comments			
Priority number		duration (years)	parties	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5					
1	1.3.1	Livestock grazing.	10	USFS, WDNR, NRCS, WDFW	1800	100	100	200	200	200	Includes 2 years for plan development and 8 years implementation.			
1	1.3.2	Evaluate enforcement of timber harvest regulations.	25	WDNR, USFS, USFWS	*									
1	1.3.3	Repair roads and culverts.	10	USFS, WDNR, NRCS, YN	2,000	200	200	200	200	200				
1	1.3.4	Address road access impacts.	25	WDFW, USFS, USFWS	*									
1	1.3.5	Minimize mining impacts.	25	WDFW, WDNR, USFS	*									
1	1.3.6	Manage camping.	5	USFS, WDFW	500	100	100	100	100	100				
1	1.4.1	Fish passage.	10	USBR USFWS, WDFW, YN, NMFS, BRD	3000	300	300	300	300	300				

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	Middle Columbia Recovery Unit - Implementation Schedule													
	Task	Task description	Task	Responsible parties		(Cost estima	tes (\$1,000	0)		Comments			
Priority number number	number		duration (years)		Total cost	Year 1	Year 2	Year 3	Year 4	Year 5				
1	1.4.4	Flow regimes.	2	BOR, USFWS, WDFW, YN, NMFS, BRD	*									
1	1.4.5	Reservoir operations.	2	USBR, WDFW USFWS, YN, NMFS, BRD	200	100	100							
1	2.5.1	Non-native harvest.	25	WDFW, YN	*									
1	2.5.2	Eliminate stocking.	25	WDFW	*									
1	2.5.3	Reduce non-native species.	15	WDFW, YN, USFWS, USFS	3000	200	200	200	200	200				
1	3.2.1	Harvest regulations.	25	WDFW, YN, USFWS	*						Ongoing			
1	4.1.1	Develop genetic management plan.	3	USFWS, YN WDFW, BRD	300	100	100	100						

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	Middle Columbia Recovery Unit - Implementation Schedule											
	Task number	Task description	Task	Responsible		(Cost estima	tes (\$1,000))		Comments	
Priority number			duration parties (years)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5			
1	5.1.1	Habitat assessments.	3	USFWS, USBR, WDFW, USFS, YN, BRD	300	100	100	100				
1	5.2.1	Monitoring program.	3	USFWS, USFS, WDFW, YN, USBR	*							
1	5.5.1	Distribution surveys.	5	WDFW, USFS, USBR, USFWS, YN	500	100	100	100	100	100		
1	5.5.3	Habitat use.	10	WDFW, YN, USFWS, USBR	2000	200	200	200	200	200		
1	6.1.1	Support collaborative efforts.	5	WDFW, USFS, NRCS, YC, KC, BC, USBR, TCWRA	500	100	100	100	100	100	Funding needed for 5 years for cost share activities. Coordinate with 1.1.3	

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	Middle Columbia Recovery Unit - Implementation Schedule												
	Task Task description number	Task description	Task	Responsible		(Cost estima	tes (\$1,000	0)		Comments		
Priority number		duration (years)	parties	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5				
2	1.1.1	Reduce mining runoff.	3	WDOE, USFS, WDFW	1500	500	500	500					
2	1.1.2	Reduce sediment inputs.	10	WDNR, EPA NRCS, USFS, WDOE, ID	5000	500	500	500	500	500			
2	1.3.7	Road management.	25	WDFW, USFS, USFWS	*								
2	1.3.8	Develop habitat guidelines.	3	USFWS WDNR, WDOE, YN	300	100	100	100					
2	1.4.2	Reduce entrainment.	5	USBR, WDFW, USFWS	1000	200	200	200	200	200			
2	1.4.6	Reservoir investigations.	5	WDFW, USBR, USFS, USFWS, BRD	1000	200	200	200	200	200			
2	3.2.2	Reduce fishing pressure.	25	WDFW, YN	*								

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	Middle Columbia Recovery Unit - Implementation Schedule												
n : ::	Task Task description number	Task description	Task	Responsible parties		(Cost estima		Comments				
Priority number			duration (years)		Total cost	Year 1	Year 2	Year 3	Year 4	Year 5			
2	3.2.3	Provide information to anglers.	5	WDFW, USFS, USFWS	750	150	150	150	150	150			
2	4.2.1	Artificial propagation.	3	USFWS, WDFW, YN	30	10	20	10					
2	6.1.2	Habitat protection.	10	WDNR, NRCS WDFW, YN	5000	500	500	500	500	500			
2	6.1.3	Watershed groups, conservation districts, and landowners.	25	CD, WDNR, YC, KC, BC, TCWRA, USFWS, WDFW	*								
2	6.3.1	Evaluate State habitat protection laws.	25	WDNR, WDOE, WDFW, USFWS	*								
3	1.4.3	Water temperature control.	5	USBR, WDFW, FWS, USFS, WDOE	500	100	100	100	100	100			

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	Middle Columbia Recovery Unit - Implementation Schedule											
	Task	Task description	Task	Responsible		(Comments					
Priority number	number		duration (years)	parties	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5		
3	2.5.4	Assess stocking practices.	3	WDFW, YN	75	25	25	25				
3	5.5.2	Predation.	5	WDFW, YN, USFS, USFWS	500	100	100	100	100	100		
3	5.5.4	Problem Assessments.	3	WDFW, YN, USFS, YN, YC, KC, BC, TCWRA, USFWS	90	30	30	30				
3	7.3.1	Periodically review progress towards recovery goals and assess recovery task priorities.	25	USFWS	*							